

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SE-3557	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2004/010827	International filing date (day/month/year) 28.09.2004	Priority date (day/month/year) 10.11.2003	
International Patent Classification (IPC) or national classification and IPC . F23J13/04 F23L11/02 F23J13/08			
Applicant STEAG ENCOTEC GMBH			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 3 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>
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<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

international search (Rule 12.3 and 23.1(b))
 publication of the international application (Rule 12.4)
 international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished
 the description:

pages 3-8 as originally filed/furnished
 pages* 1, 2, 2a received by this Authority on 16.07.2005 with letter of 16.07.2005
 pages* _____ received by this Authority on _____

the claims:

nos. 1-19 as originally filed/furnished
 nos.* _____ as amended (together with any statement) under Article 19
 nos.* _____ received by this Authority on _____
 nos.* _____ received by this Authority on _____

the drawings:

sheets 1/3-3/3 as originally filed/furnished
 sheets* _____ received by this Authority on _____
 sheets* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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1. Statement

Novelty (N)	Claims	1-9, 13-16, 18, 19	YES
	Claims	10-12, 17	NO
Inventive step (IS)	Claims	1-9, 14-16	YES
	Claims	10-14, 17-19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

1 This report makes reference to the following documents:

D1: DE 34 01 922 A
 D2: DE 23 46 515 B
 D3: US 2002166587 A
 D4: PAJ 61 -83822
 D5: DE 967916 C

2 INDEPENDENT CLAIM 1

2.1 D1 discloses a method of controlling a chimney draft on a burning system connected upstream, in which method a flue that is open toward the bottom is provided with a flap in such a way that, in order to control a chimney draft on the burning system connected upstream, a portion of the cross-section of the flue is exposed as a result of movement of the flap.

2.2 The subject matter of independent claim 1 differs therefrom in that the flue is immersed in a tub in such a way that, by means of the liquid collected in the tub, a liquid barrier is formed which

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<p>closes the flue on the flue gas end, and in that, to control the draft on the system connected upstream, a portion of the cross-section is exposed by the liquid level being lowered to under the edge of the flue.</p> <p>2.3 The subject matter of claim 1 is therefore novel (PCT Article 33(2)).</p> <p>2.4 The problem to be solved by the present invention can therefore be regarded as that of providing quicker and simpler dynamic opening and sealing of the air passage cross-section in order to control a draft.</p> <p>2.5 Although it is already known from D2 to immerse the lower end of a flue, which expands in length as a result of thermal conditions, in a tub filled with a liquid in order to seal the flue, D2 does not contain anything that would suggest that this system be used or can be used to create an air inlet cross-section by lowering the liquid level.</p> <p>2.6 The subject matter of claim 1 is therefore inventive (PCT Article 33(3)).</p> <p>3. DEPENDENT CLAIMS 2 TO 9</p> <p>Claims 2 to 9 are dependent on claim 1 and therefore also meet the PCT requirements for novelty and inventive step.</p> <p>4 INDEPENDENT CLAIM 10</p>	

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PCT/EP2004/010827Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

4.1 D2 (the references in parentheses are to D2) describes that a flue (7) that is open at the bottom can be immersed in a tub and that, by means of a liquid (15) collected in the tub, a liquid barrier is formed which seals the flue from the environment at the flue gas end.

4.2 Furthermore, it is possible, for example, owing to the fact that the tub and the flue can be displaced telescopically relative to each other (see column 6, lines 2-8), to lower the liquid level to below the edge of the flue in order to expose a portion of the flue cross-section. The liquid level can therefore be lowered to under the edge of the flue, and thus a portion of the flue cross-section can be exposed. A system of this type is also suitable for reducing the effect of a flue draft on an upstream flue gas-purifying system.

4.3 The present application therefore fails to meet the requirements of PCT Article 33(2) because the subject matter of claim 10 is not novel within the meaning of PCT Article 33(2).

5 DEPENDENT CLAIMS 11 TO 13 AND 17 TO 19
Claims 11 to 13 and 17 to 19 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step:
- for claims 11, 12, 17 see D2, figure 3,

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<ul style="list-style-type: none">- for claim 13, see D3, figure 6 and paragraph 58,- for claim 18, see D4, abstract and figures 1, 2- for claim 19, see D5, figure 1 and page 2, lines 73-84
6	<p>DEPENDENT CLAIMS 14 TO 16</p> <p>The combination of features in claims 14 to 16 are neither known nor obvious from the available prior art.</p>

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

7. The word "wir" on page 4, line 25 of the German text should read "wird".

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

8. A lack of clarity arises from the term
 “(condensate)” in parentheses in claims 1 and 10.
 This term is not regarded as a feature that limits
 the scope of the claims.